



# Compartment Review Presentation

## Shingleton Forest Management Unit

Compartment 41001

Entry Year 2017

Acreage: 1,004

County Schoolcraft

Management Area: Fox River Complex

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**Revision Date:** 2015-08-04

**Stand Examiner:** Mario Molin

**Legal Description:**

T45N R13W Sections 1, 12 and 13

**Identified Planning Goals:**

Management activities that coordinate multiple uses and benefits for the people of Michigan including recreation, timber production and protection/enhancement of wildlife habitat are desirable.

**Soil and topography:**

This area typically displays flat to gently rolling terrain, and most of this compartment features upland habitat on sandy soils including Kalkaska sand, Liminga fine sand, and Graveraet very fine sandy loam. The lowland areas are generally on either muck soils or peat. The most commonly occurring habitat types are AFPo (sugar maple-beech/hairy Solomon's seal) and ATFD (sugar maple-hemlock-beech/shield fern) which account for the dominance of northern hardwoods throughout most of the compartment. These habitat types are known to produce high-quality wood products of all tree species, but require major disturbance to keep them from reverting to the hardwoods.

**Ownership Patterns, Development, and Land Use in and Around the Compartment:**

There are numerous hunting camps on the private lands in and adjacent to this compartment. State-owned lands consist of 3 separate blocks of 40, 160, and approx. 843 acres. All are contiguous to state-owned lands in Compartment 2 to the west.

**Unique Natural Features:**

None known at this time.

**Archeological, Historical, and Cultural Features:**

None known at this time.

**Special Management Designations or Considerations:**

Due to this area's proximity to the Fox River, proper use of all BMP's associated with flowing water are critical.

**Watershed and Fisheries Considerations:**

This compartment has an un-mapped drainage that does appear to have continuous flow throughout the year, indicating inputs of groundwater. Additionally, this drainage flows into the Fox River, a designated Natural River. The Fox River system supports a very good brook trout population. The Fox is currently stocked with brook trout, but recent fisheries surveys indicate that significant natural reproduction is occurring and that suspension of stocking may be instituted to determine if the brook trout population can support itself through natural reproduction. Small streams and drainages such as this un-named drainage are important in regards to preserving water quality to larger streams and rivers, such as the Fox. Protecting the river systems from inputs of sediment is crucially important. BMP's should be followed.

**Wildlife Habitat Considerations:**

This compartment lies southeast of Seney. During pre-settlement times, sugar maple appeared to be the most abundant tree species in the upland forest. Beech, hemlock, basswood, and American elm were common, while yellow birch, red maple and balsam fir appeared to be minor components in the sugar maple forest. Tamarack, spruce and cedar dominated the lowland areas. Lowland areas within this compartment appear to be similar to pre-settlement species composition. Upland areas remain dominated by northern hardwood stands. However, the species composition of those stands has shifted from a heterogeneous mixture of hardwoods and conifers to a system dominated by sugar maple. The amount of hemlock and beech in those stands appears to have been reduced. Additionally, red pine plantations and aspen of various ages now occur across a fair portion of this compartment. Featured species in this compartment are black bear, northern goshawk, snowshoe hare, spruce grouse, and white-tailed deer. Wildlife objectives for hardwood stands include restoring structural and species diversity. Additionally, the red pine plantations within this compartment contain substantial amounts of hardwood regeneration. Through rotational thinnings, these stands will eventually revert to diverse northern hardwoods containing super-canopy red pine. Maintaining age class diversity between

the aspen stands and promoting mast-bearing tree and shrub species are also important habitat goals.

### **Mineral Resource and Development Concerns and/or Restrictions**

: Surface sediments consist of peat and muck and lacustrine (lake) sand and gravel. There is insufficient data to determine the glacial drift thickness. The Ordovician Stonington and Big Hill Formations and Queenston Shale subcrop below the glacial drift. The Stonington and Big Hill could be used for stone/dolomite. Gravel pits are not found in the general area, but there may be some potential on the uplands. There is no commercial oil and gas production in the UP.

### **Vehicle Access:**

Most of the compartment is easily accessible by woods roads that connect to the Old Seney Road (Co. Rd. 450), which also passes through the southernmost block of 160 acres in section 13. The woods road network also connects directly to Highway M-28 to the north.

### **Survey Needs:**

None known at this time.

### **Recreational Facilities and Opportunities:**

The Old Seney Road is a groomed and well-used snowmobile trail, and this area also receives heavy hunting pressure. There are no other improved recreational facilities within this compartment.

### **Fire Protection:**

The existing road network provides good access to most of the state lands, which generally feature relatively low-risk fuel types such as northern hardwoods and aspen. There are numerous open areas of grass and upland brush throughout the compartment. The adjacent private lands feature low, wet terrain that could prove challenging, both for access and their more hazardous conifer fuel types.

### **Additional Compartment Information:**

The following reports from the Inventory are attached:

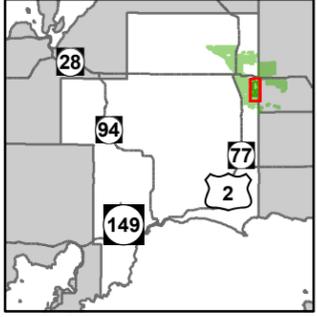
- Total Acres by Cover Type and Age Class**
- Cover Type by Harvest Method**
- Proposed Treatments – No Limiting Factors**
- Proposed Treatments – With Limiting Factors**
- Stand Details (Forested and Nonforested)**
- Dedicated and Proposed Special Conservation Areas**
- Site Condition Details**

The following information is displayed, where pertinent, on the attached compartment maps:

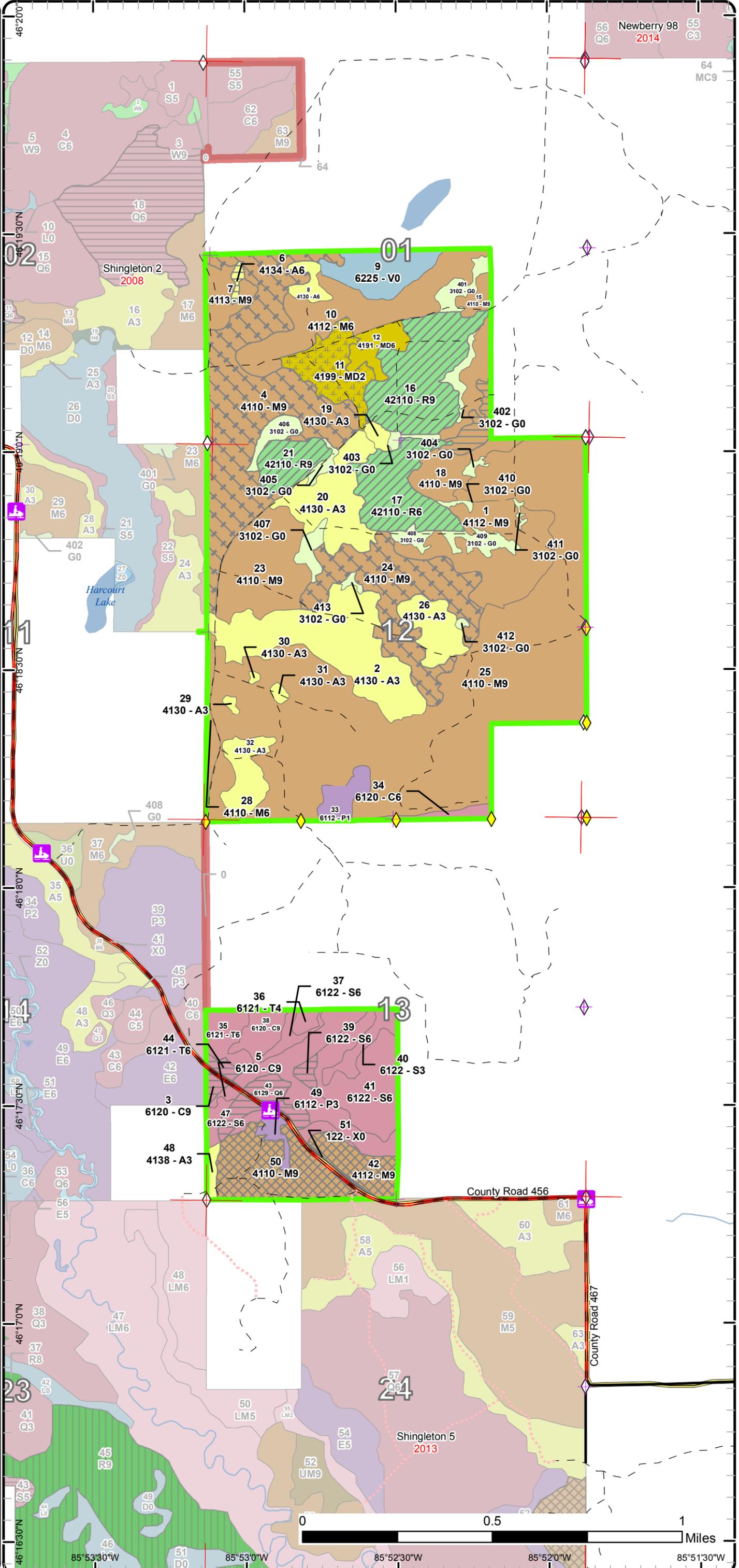
- Base feature information, stand boundaries, cover types, and numbers**
- Proposed treatments**
- Site condition boundaries**
- Details on the road access system**

# Cover Type & Treatments

Compartment: 1  
 T45N,R13W, Sec: 1, 12, 13  
 County: Schoolcraft  
 Unit: Shingleton  
 Mgmt Area: Fox River Complex  
 YOE: 2017  
 Acres: 1004 GIS Calculated  
 Examiner: Mario Molin  
 Map Revised: 8/18/2015  
 Map Phase: Review

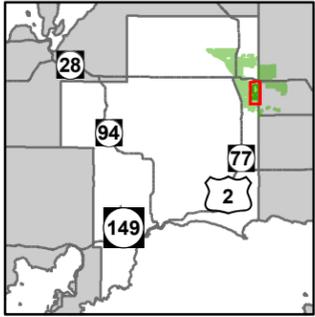


- ✚ Remonumented Section Corner
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Miris Corners
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Closed Roads
- 🛷 Snowmobile Trails
- Rivers
- Lakes
- Treatments**
- ▨ Selection (Group, Single Tree)
- ▨ Clearcut (w/Reserves)
- ▨ Other Treatment - See Comments
- ▨ Salvage
- ▨ Thinning (Crown, Low, Systematic)
- Forest Coverture**
- 411 - Northern Hardwood
- 413 - Aspen
- 419 - Mixed Upland Deciduous
- 421 - Planted Pines
- 611 - Lowland Deciduous Forest
- 612 - Lowland Coniferous Forest
- Non-Forest Coverture**
- 122 - Roads/Parking Lot
- 310 - Herbaceous Openland
- 622 - Lowland Shrub

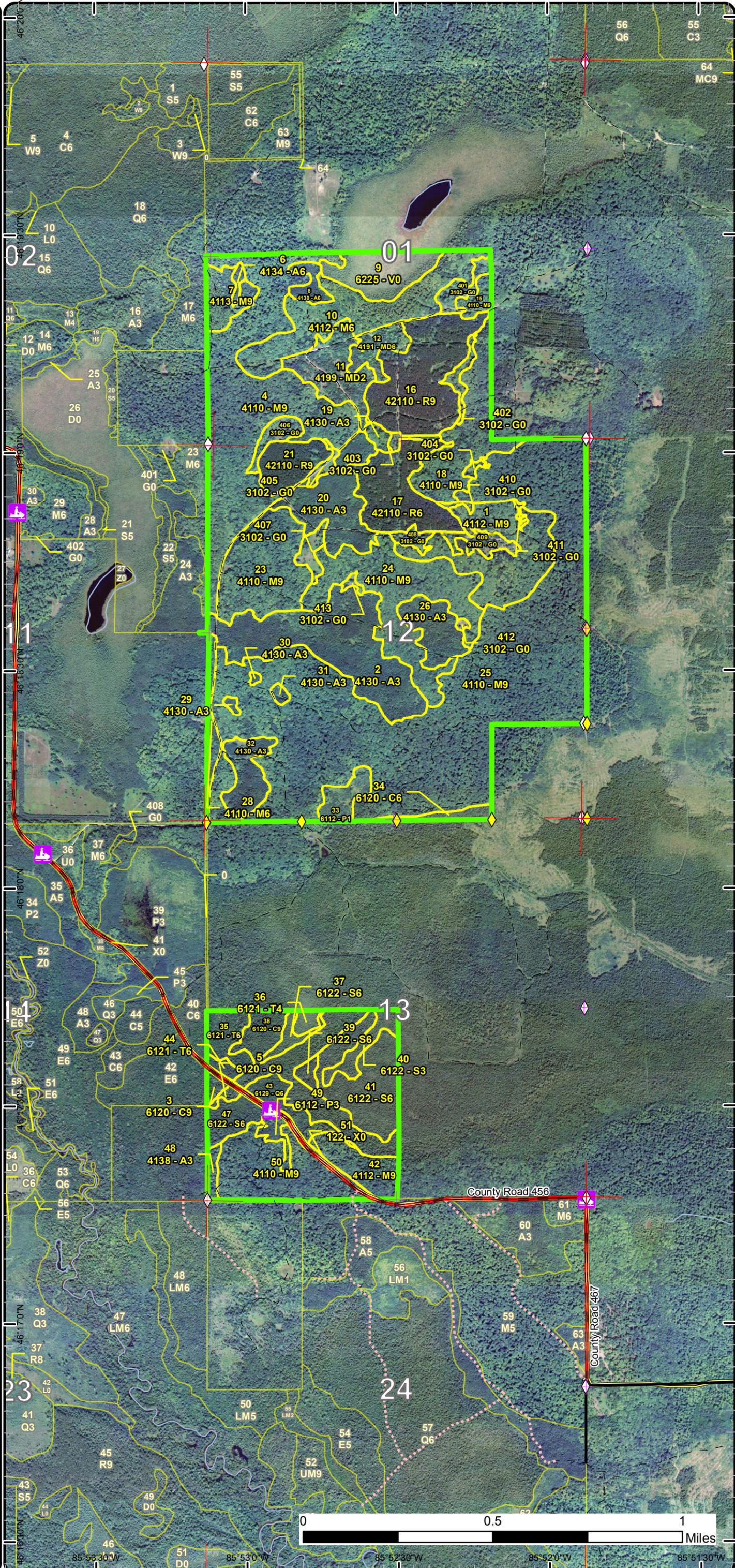


# Stand Boundary Map

Compartment: 1  
 T45N,R13W, Sec: 1, 12, 13  
 County: Schoolcraft  
 Unit: Shingleton  
 Mgmt Area: Fox River Complex  
 YOE: 2017  
 Acres: 1004 GIS Calculated  
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 Map Phase: Review

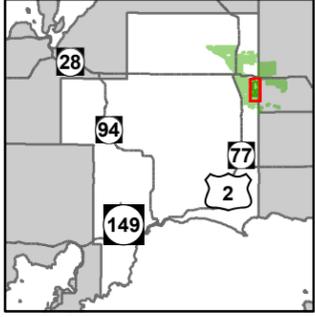


- ✚ Remonumented Section Corner
  - ◆ Survey Grade GPS Corners
  - ◇ Field Grade GPS Corners
  - Miris Corners
  - Paved Roads
  - County Gravel Roads
  - Poor Dirt Roads
  - Closed Roads
  - 🏠 Snowmobile Trails
  - Rivers
  - ▭ Stand Boundaries
- Forest Covertypes**
- 411 - Northern Hardwood
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- Non-Forest Covertypes**
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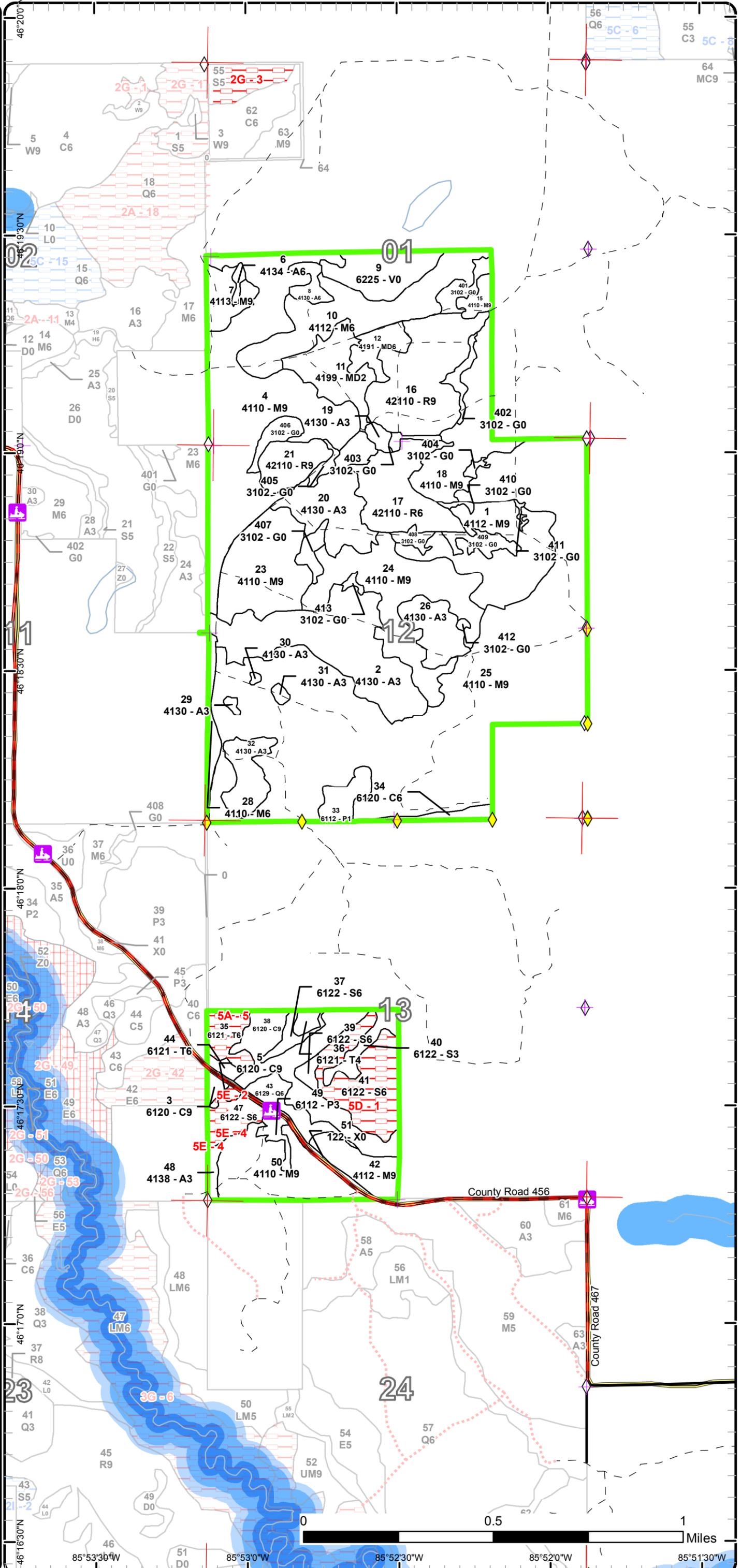


# Special Conservation Areas & Site Conditions Map

Compartment: 1  
 T45N,R13W, Sec: 1, 12, 13  
 County: Schoolcraft  
 Unit: Shingleton  
 Mgmt Area: Fox River Complex  
 YOE: 2017  
 Acres: 1004 GIS Calculated  
 Examiner: Mario Molin  
 Map Revised: 8/18/2015  
 Map Phase: Review



- ⊕ Remonumented Section Corner
- ◆ Survey Grade GPS Corners
- ◇ Field Grade GPS Corners
- Miris Corners
- Paved Roads
- County Gravel Roads
- Poor Dirt Roads
- Closed Roads
- ⊞ Snowmobile Trails
- Rivers
- Stand Boundaries
- Site Condition
- Unavailable
- Unavailable Factors
- 2G: Too wet (sensitive soils, does not include access issues)
- 5A: Not able to obtain desirable regeneration
- 5D: Unproductive Forest Land
- 5E: Long-Term Retention
- Special Conservation Areas
- Natural Rivers Vegetative Buffer
- Natural Rivers Zoning District
- High Priority Trout Stream Buffer
- Other SCA (No Category Assigned)



46°16'30"N 85°53'30"W 85°53'0"W 85°52'30"W 85°52'0"W 85°51'30"W

Report 1 – Total Acres by Cover Type and Age Class



Age Class

	Non-Forest	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150+	Uneven-Aged	Total
Aspen	0	0	0	116	0	0	1	0	0	0	0	0	0	0	0	0	0	0	117
Bog	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
Cedar	0	0	0	0	0	0	0	0	0	0	4	0	3	0	0	32	0	0	39
Herbaceous Openland	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
Lowland Aspen/Balsam Poplar	0	8	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Lowland Conifers	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	8
Lowland Spruce/Fir	0	0	0	0	0	7	0	0	0	8	31	0	0	0	0	0	0	4	50
Mixed Upland Deciduous	0	0	0	19	0	0	8	0	0	0	0	0	0	0	0	0	0	0	27
Northern Hardwood	0	0	0	0	0	0	0	0	448	0	45	0	0	0	0	0	0	110	603
Red Pine	0	0	0	0	0	81	0	0	0	0	0	0	0	0	0	0	0	0	81
Tamarack	0	0	0	0	0	2	0	0	2	9	0	0	0	0	0	0	0	0	13
Urban	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
<b>Total</b>	<b>55</b>	<b>8</b>	<b>0</b>	<b>139</b>	<b>0</b>	<b>90</b>	<b>9</b>	<b>0</b>	<b>450</b>	<b>17</b>	<b>88</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>114</b>	<b>1005</b>



## Report 2 – Treatment Summary

Shingleton Mgt. Unit  
Year of Entry: 2017

Acres of Harvest

Compartment 1  
Total Compartment Acres: 1,004

Commercial Harvest - 290  
Harvests with Site Condition - 0  
Next Step Harvest - 0  
Habitat Cut - 0

### Cover Type by Harvest Method

	Clearcut	Selection	Patch Clearcut	Seed Tree	Shelterwood	Thinning	Overstory Removal	Salvage	Other	Total Acres
Aspen	1	0	0	0	0	0	0	0	0	1
Cedar	2	0	0	0	0	0	0	0	0	2
Lowland Conifers	6	0	0	0	0	0	0	0	0	6
Lowland Spruce/Fir	6	0	0	0	0	0	0	0	0	6
Northern Hardwood	7	45	0	0	0	0	140	0	0	192
Red Pine	0	0	0	0	0	81	0	0	0	81
Tamarack	2	0	0	0	0	0	0	0	0	2
<b>Total</b>	<b>24</b>	<b>45</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>81</b>	<b>0</b>	<b>140</b>	<b>0</b>	<b>290</b>

### Proposed and Next Step Treatments by Method

	Harvest	Site Prep	Planting	Seeding	Burning	Pesticide	Monitoring	Other	Non-Forest Mgt.	Total Acres
Current	290	0	0	0	0	0	19	0	0	309
Next Step	0	0	140	0	0	0	88	0	0	229
<b>Total</b>	<b>290</b>	<b>0</b>	<b>140</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>88</b>	<b>19</b>	<b>0</b>	<b>538</b>



Stand	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
3	41001003-Cut	1.8	6120 - Lowland Cedar	Sawtimber Well	115	141-170	Harvest	Clearcut with Retention	613 - Lowland Mixed Forest	Even-Aged	Proposal

**Habitat Cut: No****Site Condition:**

Prescription Clear cut with oak and hemlock reserved. Retention is uncut portion of stand.

Specs:

2015: Was on contract and returned.

OPIC - FMD: A few hardwoods and balsam fir are also present, especially in the understory. Unevenaged characteristics are developing. Harvest now. Acceptable regeneration includes all conifers, aspen and birch. The Old Seney Rd. is part of the snowmobile trail.

Next StepTreatments:

Acceptable Any mix of lowland species.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

4	41001004-Cut	91.5	4110 - Sugar Maple Association	Sawtimber Well	78	81-110	Harvest	Salvage	4111 - S.Maple, Hard Mast Association	Uneven-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Salvage cut ash.

Specs: Additional trees may be marked for operations during administration. Green tree a few Ash trees per Wildlife Div.

Next StepTreatments:

Acceptable Mix of species

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2015

6	41001006-Cut	1.4	4134 - Aspen, Spruce/Fir	Poletimber Well	55	51-80	Harvest	Clearcut	413 - Aspen	Even-Aged	Proposal
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**Habitat Cut: No****Site Condition:**

Prescription Clear-cut down to 2 inches with no retention. Stand is very small, unless it can be justified why to have retention.

Specs:

Do not cut oak or hemlock if present.

Next StepTreatments:

Acceptable Aspen

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2015

11	41001011-Other	18.9	4199 - Other Mixed Upland Deciduous	Sapling Medium	26	1-50	Other	Other	412 - Oak Types	Even-Aged	Proposal
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**Habitat Cut: Yes****Site Condition:**

Prescription Oak release per wildlife.

Specs:Next StepTreatments:

Acceptable oak

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
16	41001016-Cut	41.2	42110 - Planted Red Pine	Sawtimber Well	47	141- 170	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Mark to 120BA leave all mast trees.											
<u>Specs:</u>											
<u>Next Step</u>											
<u>Treatments:</u>											
<u>Acceptable</u>											
<u>Regen:</u>											
<u>Other</u> Old next step comments:											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2016											
17	41001017-Cut	27.5	42110 - Planted Red Pine	Poletimber Well	47	171- 200	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Mark to 120 and leave any mast trees present.											
<u>Specs:</u>											
<u>Next Step</u>											
<u>Treatments:</u>											
<u>Acceptable</u> none											
<u>Regen:</u>											
<u>Other</u> Old next step comments:											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2016											
18	41001018-Cut	6.8	4110 - Sugar Maple Association	Sawtimber Well	78	81-110	Harvest	Clearcut	4134 - Aspen, Spruce/Fir	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Clear-cut aspen/fir pockets down to 2 inches. No retention, trying to capture a small pocket of over mature aspen and fir. Some aspen and fir will still be in the parent stand.											
<u>Specs:</u>											
No cut oak and hemlock if present											
<u>Next Step</u>											
<u>Treatments:</u>											
<u>Acceptable</u> Aspen and fir.											
<u>Regen:</u>											
<u>Other</u> Old next step comments:											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2016											
21	41001021-Cut	12.1	42110 - Planted Red Pine	Sawtimber Well	47	141- 170	Harvest	Low Thinning	4211 - Planted Red Pine	Even-Aged	Proposal
<b>Habitat Cut: No</b>			<b>Site Condition:</b>								
<u>Prescription</u> Mark down to 120BA, leave all mast trees.											
<u>Specs:</u>											
<u>Next Step</u>											
<u>Treatments:</u>											
<u>Acceptable</u> Red Pine											
<u>Regen:</u>											
<u>Other</u> Old next step comments:											
<u>Comment:</u>											
<u>Proposed Start Date:</u> 10/1 /2016											



S t a n d	Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
24	41001024-Cut	48.6	4110 - Sugar Maple Association	Sawtimber Well	78	111- 140	Harvest	Salvage	411 - Northern Hardwood	Uneven- Aged	Proposal

**Habitat Cut: No****Site Condition:**Prescription Salvage ash. Green tree a few Ash.Specs: Can mark additional trees for operations if necessary during administration.Next StepTreatments:Acceptable Any mix of species.Regen:Other Old next step comments:Comment:Proposed Start Date: 10/1 /2015

39	41001039-cut- oi	2.3	6122 - Black Spruce	Poletimber Well	90	141- 170	Harvest	Clearcut	6124 - Lowland Spruce-Fir	Even-Aged	Completed - Pending Edits
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**Habitat Cut: No****Site Condition:**Prescription 2015: Was on contract but returned.Specs: Clearcut with any hemlock and oak reserved if present.

OPIC - FMD: Blowdown and break-up are becoming more evident - harvest now. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and birch.

Next StepTreatments:Acceptable Any mix of lowland species.Regen:Other Old next step comments:Comment:Proposed Start Date: 10/1 /2016

42	41001042-Cut	13.1	4112 - Maple, Beech, Cherry Association	Sawtimber Well	90	81-110	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven- Aged	Proposal
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**Habitat Cut: No****Site Condition:**Prescription Mark down to 80-90BA. Leave all beech and remove any ash.Specs: Do not mark cedar or hemlock unless necessary for operations.  
No chipping.Next StepTreatments:Acceptable Any mix of species on site.Regen:Other Old next step comments:Comment:Proposed Start Date: 10/1 /2016

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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
43 41001043-cut-oi	6.3	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	90	81-110	Harvest	Clearcut	613 - Lowland Mixed Forest	Even-Aged	Completed - Pending Edits

**Habitat Cut: No****Site Condition:**Prescription 2015: Was on contract and returned.Specs: Clear cut with any oak or hemlock being reserved, exclude cedar where possible with redline. No chipping.

OPIC - FMD: This stand is a mix of conifers and hardwoods on a transitional site between the upland hardwoods and the cedar. The year of origin is a reasonable estimate of the age of most of the stand's components, but the hemlock and larger yellow birch

Next StepTreatments:Acceptable Any mix of lowland conifer and lowland hardwood.Regen:Other Old next step comments:Comment:Proposed Start Date: 10/1 /2016

44 41001044-cut-oi	2.1	6121 - Tamarack	Poletimber Well	70	111-140	Harvest	Clearcut	6128 - Lowland Coniferous, Mixed Deciduous	Even-Aged	Completed - Pending Edits
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**Habitat Cut: No****Site Condition:**Prescription Clear cut with oak and hemlock reserved.Specs: Exclude cedar with redline where possible

OPIC - FMD: Breaking up and blowing down - harvest now. Listed here as a conversion to a lowland conifer mix, but tamarack is likely to become a major component of the next stand. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and

Next StepTreatments:Acceptable mixed conifers and hardwood currently on siteRegen:Other Old next step comments:Comment:Proposed Start Date: 10/1 /2016

47 41001047-cut-oi	3.8	6122 - Black Spruce	Poletimber Well	80	51-80	Harvest	Clearcut	61299 - Mixed Swamp Conifer (OI)	Even-Aged	Completed - Pending Edits
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**Habitat Cut: No****Site Condition:**Prescription 2015: Was on contract and returned

Specs: OPIC - FMD: This stand is a mix of conifers and hardwoods on a transitional site between the upland hardwoods and the cedar. The year of origin is a reasonable estimate of the age of most of the stand's components, but the hemlock and larger yellow birch

Next StepTreatments:Acceptable Mix of conifer and lowland hardwood.Regen:Other Old next step comments:Comment:Proposed Start Date: 10/1 /2016



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Treatment Name	Acres	Stand CoverType	Size Density	Stand Age	BA Range	Treatment Type	Treatment Method	Cover Type Objective	Age Structure	Approval Status
50 41001050-Cut	32.0	4110 - Sugar Maple Association	Sawtimber Well	90	141-170	Harvest	Single Tree Selection	411 - Northern Hardwood	Uneven-Aged	Proposal

**Habitat Cut: No**

**Site Condition:**

Prescription Mark to 80-90BA. Maintain regeneration gaps, remove any ash if present. Leave all beech unless in heavy concentration.

Specs: Do not cut cedar or hemlock unless necessary for operations.  
No chipping.

Next Step

Treatments:

Acceptable Any mix of trees.

Regen:

Other Old next step comments:

Comment:

Proposed Start Date: 10/1 /2016

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**Total Treatment Acreage Proposed: 309.3**

Dominant Site Conditions

	5A	5D	5E
Aspen			
Bog			
Cedar			1
Herbaceous Openland			
Lowland Aspen/Balsam Poplar			
Lowland Conifers			
Lowland Spruce/Fir		29	5
Mixed Upland Deciduous			
Northern Hardwood			
Red Pine			
Tamarack	9		
Urban			
Total Forested Acres	9	29	6
Relative Percent			

*\*Due to limitations in the current Site Conditions Analysis tool, all nonforested acres are considered available. Future development will enable analysis of nonforested types.*

Site No.	Dominant Site Cond Availability	Dominant Site Condition	Acres	Other Site Condition	Other Site Condition	Other Site Condition	Other Site Condition
1	Unavailable	5D: Unproductive Forest Land	29	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
2	Unavailable	5E: Long-Term Retention	1	3J: Water quality / BMPs (stream, river, or lake)	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

## Report 5 – Site Conditions

Shingleton Mgt. Unit

Mario Molin : Examiner

Compartment: 1

Year of Entry: 2017

3	<b>Unavailable</b>	<b>2G: Too wet (sensitive soils, does not include access issues)</b>	10	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							
4	<b>Unavailable</b>	<b>5E: Long-Term Retention</b>	5	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b> These portions of the stand contain little merchantable timber.							
5	<b>Unavailable</b>	<b>5A: Not able to obtain desirable regeneration</b>	9	Unspecified	Unspecified	Unspecified	Unspecified
<b>Comments:</b>							

Mgt. Unit

Compartment: #Type!

Year of Entry:



### Report 6 – PROPOSED SPECIAL CONSERVATION AREA\* (SCA) DETAILS

\* This is a partial list of SCAs for this compartment. Not included are those areas identified under other Department initiatives (Natural Rivers, Deer Wintering Areas, etc.). Those will be identified in separate, future map and report products.

SCA Name	SCA Category	Detail Type	Recommendation	Acres
<b>Comments</b>				



**Report 7 – EXISTING SPECIAL CONSERVATION AREA DETAILS**

\* This is a list of SCA's for this compartment along with a 1/4 mile buffer surrounding the compartment. Refer to the Special Conservation Area Map for locations of the below listed Conservation Areas.

ERA = Ecological Reference Area  
HCVA = High Conservation Value Area  
SCA = Special Conservation Area

Conservation Area	Type	Description
SCA	Riparian Area	A transitional area between aquatic and terrestrial ecosystems in which the terrestrial ecosystem influences the aquatic ecosystem and vice-versa. Because of the unique conditions adjacent to lakes, streams and open water wetlands, riparian areas harbor a high diversity of plants and wildlife. Riparian communities are ecologically and socially significant in their effects on water quality and quantity, as well as aesthetics, habitat, bank stability, timber production, and their contribution to overall biodiversity.
HCVA	Natural Rivers	There are two Natural Rivers datasets which are derived from spatial buffers set from an established and approved distance from the river centerlines. The Natural Rivers Zoning District is a 400 foot buffer for most Natural Rivers. The Vegetative Buffer ranges from 25 to 100 feet. To view specific Zoning Districts and Vegetative Buffers for each Natural River see the table located on the I:\Documentation\GDSE data folder.
ERA	Ecological Reference Areas	Ecological Reference Areas (ERAs) are high quality examples of natural communities that have been identified as Element Occurrences (EOs) by the Michigan Natural Features Inventory (MNFI) within the context of their natural community classification system. Element Occurrences with viability ranks of A (Excellent) or B (Good) and a Global (G) or State (S) element (rarity) ranking of endangered (1), threatened (2), or rare (3) serve as an initial base of ERAs. They may be located upon any ownership in the State. The system is comprised of individual or associations of natural community types that are managed for restoration and maintenance of natural ecological processes and values. The public may submit recommendations for lands as ERAs using the DNR Conservation Area Recommendation Form.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
1	4112 - Maple, Beech, Cherry Association	Sawtimber Well	36.7	78	81-110	Cut in 2001. Stand is variable as far as stocking, areas with higher BA is due to red maple clumps. Scattered spruce on edges as well as beech brush.
2	4130 - Aspen	Sapling Well	53.2	21	1-50	OPIC - FMD: UPDATED TCR 1/12/99 - 031-90-01 Soils - McMillan-Greylock fine sandy loams at 6-15% slopes YOE 2008: Young aspen with scattered residual conifers from the last stand, and occasional pockets of conifer regeneration. A few small patches of pin cherry etc. are also present, but provide valuable soft mast for wildlife.
3	6120 - Lowland Cedar	Sawtimber Well	1.8	115	141-170	Part of stand was included was included in a sale and not cut. There is Blue paint on the west side against compartment 2.  OPIC - FMD: A few hardwoods and balsam fir are also present, especially in the understory. Unevenaged characteristics are developing. Harvest now. Acceptable regeneration includes all conifers, aspen and birch. The Old Seney Rd. is part of the snowmobile trail network, and adjacent to this stand. Sale sold to zellar ex under contract number 41-023-08-01 osr conifers Unit returned uncut. RH3/22/14
4	4110 - Sugar Maple Association	Sawtimber Well	91.5	78	81-110	OPIC - FMD: Last cut in 2002. Mixed hardwood pulp includes basswood, beech, red maple and yellow birch.  Seems to have enough ash to set up a salvage cut.
5	6120 - Lowland Cedar	Sawtimber Well	1.2	115	141-170	Part of stand was included was included in a sale and not cut. There is Blue paint on the west side against compartment 2. OPIC - FMD: A few hardwoods and balsam fir are also present, especially in the understory. Unevenaged characteristics are developing. Harvest now. Acceptable regeneration includes all conifers, aspen and birch. The Old Seney Rd. is part of the snowmobile trail network, and adjacent to this stand. Sale sold to zellar ex under contract number 41-023-08-01 osr conifers Unit returned uncut. RH3/22/14
6	4134 - Aspen, Spruce/Fir	Poletimber Well	1.4	55	51-80	OPIC - FMD: Some partial cutting done around 1993. Finish the cut next entry when thinning the adjacent hardwoods.  Mature aspen with lots of advance maple regeneration.
7	4113 - R.Maple, Conifer	Sawtimber Well	9.6	75	81-110	OPIC - FMD: Cut for aspen regeneration but never TSI'd - now a mix of maple and beech regen with scattered aspen whips and a few residual aspen & hardwood stems.  Stand is a bit odd, red maple overstory with a fir being codominate in many parts. Scattered hemlock in places as well as a few beech.
8	4130 - Aspen	Poletimber Well	4.6	22	51-80	OPIC - FMD: 2-4" aspen with red maple etc. understory.
10	4112 - Maple, Beech, Cherry Association	Poletimber Well	39.7	78	81-110	OPIC - FMD: Mixed hardwood logs and pulp both include basswood and yellow birch.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
11	4199 - Other Mixed Upland Deciduous	Sapling Medium	18.9	26	1-50	OPIC - FMD: Semi-open area with scattered trees, upland brush, and open grassy areas. Oak was planted in 1989, but not many survived.
12	4191 - Mixed Upland Deciduous with Conifer	Poletimber Well	8.2	50	1-50	OPIC - FMD: Mix of hardwood regeneration, upland brush, and a few scattered merchantable trees.
15	4110 - Sugar Maple Association	Sawtimber Well	4.2	78	81-110	OPIC - FMD: Check again in 10 years - may be ready to thin by then. Beech and ironwood are scattered throughout this stand.
16	42110 - Planted Red Pine	Sawtimber Well	41.2	47	141-170	[8/13/08] Now under contract TS 41-003-07-01 Octo-Pine. Residual BA: Red pine - 113; b.cherry - 3; total = 116 sq.ft./acre [2-24-12] Sale is now closed/completed TCR dtd 1/30/12.
17	42110 - Planted Red Pine	Poletimber Well	27.5	47	171-200	OPIC - FMD: FDF. THIN ASAP by removing every third row where applicable, and also salvage poorly formed trees, porcupine damage, etc. from the remaining rows. The logs are about 12-14" diameter, while the poles are mostly about 7-9". The other volume shown consists of scattered red maple and aspen. [8/13/08] Now under contract TS 41-003-07-01 Octo-Pine. Residual BA: Red pine - 120; b.cherry - 1; total = 121 sq.ft./acre [2-24-12] Sale is now closed/completed TCR dtd 1/30/12.
18	4110 - Sugar Maple Association	Sawtimber Well	29.2	78	81-110	OPIC - FMD: Mixed pulpwood includes ash, red maple and conifers.
19	4130 - Aspen	Sapling Well	2.3	20	1-50	
20	4130 - Aspen	Sapling Well	26.0	20	1-50	OPIC - FMD: Young aspen 1-2" DBH over maple regen
21	42110 - Planted Red Pine	Sawtimber Well	12.1	47	141-170	OPIC - FMD: FDF. THIN ASAP by removing every third row where applicable, and also salvage poorly formed trees, porcupine damage, etc. from the remaining rows. The logs are about 12-14" diameter, while the poles are mostly about 8-10". Remove scattered aspen and hardwoods. [8/13/08] Now under contract TS 41-003-07-01 Octo-Pine. Residual BA: Red pine - 101; b.cherry - 5; total = 106 sq.ft./acre [2-24-12] Sale is now closed/completed TCR dtd 1/30/12.
23	4110 - Sugar Maple Association	Sawtimber Well	34.2	78	81-110	OPIC - FMD: Last cut in 2002. Mixed hardwood includes basswood, beech, red maple and yellow birch.  Areas of higher BA are due to tree clumps, wait to harvest at next entry.
24	4110 - Sugar Maple Association	Sawtimber Well	48.6	78	111-140	OPIC - FMD: Mixed pulpwood includes ash, red maple and conifers.  Low quality stand, maple and ash clumps.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
25	4110 - Sugar Maple Association	Sawtimber Well	258.1	78	81-110	OPIC - FMD: Select cut under TS# 24-98-01TCR dtd 6-13-01. Mixed pulpwood includes red maple, white ash, basswood and ironwood.  This is a very large and fairly uniform stand, BA is just not quite there yet to schedule a harvest. None of the hardwood in this portion of the compartment is being harvested, cutting a small portion would help spread the available acres out in the future entry years.
26	4130 - Aspen	Sapling Well	13.2	21	1-50	OPIC - FMD: Young aspen
28	4110 - Sugar Maple Association	Poletimber Well	5.3	78	81-110	OPIC - FMD: OI Stand Year Origin was 555
29	4130 - Aspen	Sapling Well	0.8	22	Immature	OPIC - FMD: Young aspen
30	4130 - Aspen	Sapling Well	0.5	22	Immature	OPIC - FMD: Young aspen
31	4130 - Aspen	Sapling Well	1.1	22	Immature	OPIC - FMD: Young aspen
32	4130 - Aspen	Sapling Well	12.1	22	Immature	OPIC - FMD: UPDATED TCR 1/12/99 - 031-90-01 Young aspen over a mix of hardwood regen and upland brush species. Stand includes some semi-open grassy areas.
33	6112 - Lowland Aspen	Sapling Poor	7.6	5	Immature	OPIC - FMD: READY TO CUT- Aspen stand that includes some mixed lowland timber. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and birch. [8/13/08] Now under contract TS 41-003-07-01 Octo-Pine. See also FTP W41-1365 (aspen TSI.) Residual BA: cedar = 1 sq.ft./acre [2-24-12] Sale is now closed/completed TCR dtd 1/30/12.  Stand is regenerating well, some residual maple and fir in the small pole size renage.
34	6120 - Lowland Cedar	Poletimber Well	4.1	97	141-170	OPIC - FMD: Cedar and others along the transition from the upland hardwoods to the lowland conifers. Mixed hardwood includes red maple, yellow birch and ashes.
35	6121 - Tamarack	Poletimber Well	8.9	82	81-110	OPIC - FMD: This stand was previously classified as a lowland aspen type, but all the aspen/balsam poplar that were here have died out. The remaining stand is now best described as a two-aged mix of lowland hardwoods and conifers, with unevenaged characteristics becoming evident. The paper birch still appears to be healthy, so the best choice at this time is to hold the stand for at least ten more years to allow it to accumulate more volume. A mix of cedar, balsam fir, red maple and black ash will eventually dominate the site. The understory, stand density and site indices are quite variable.



	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
36	6121 - Tamarack	Poletimber Poor	2.3	40	1-50	OPIC - FMD: Very slow-growing mix of conifers and lowland brush on a wet, boggy site with a high water table. Some of the trees may eventually reach merchantable size, but the site indices appear to be too low to consider this stand for commercial management. The site index given is a rough guess.
37	6122 - Black Spruce	Poletimber Well	3.7	40	1-50	OPIC - FMD: Slow-growing conifer mix with a few 6-7" DBH cedar and spruce. The site index appears to be higher than that of the adjacent treed bog, but still relatively low. This stand is gradually filling in with cedar, balsam fir, tamarack and black spruce. Excluding the poles, DBH's run from 0-4" and tree heights from 2' to 25'.
38	6120 - Lowland Cedar	Sawtimber Well	31.9	141	141-170	OPIC - FMD: The year of origin shown here is a rough estimate, representing the larger (14-16" DBH) cedar. Evidence of multiple age classes and variable site indices make precise classification difficult, since some areas of this stand have been partially cut. The size & density of the understory are also quite variable, with cedar and balsam fir the most common species. The mixed pulpwood includes paper birch, tamarack, black ash and a few red maple. The Old Seney Rd. is part of the snowmobile trail network, and adjacent to this stand.
39	6122 - Black Spruce	Poletimber Well	2.3	90	141-170	OPIC - FMD: Blowdown and break-up are becoming more evident - harvest now. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and birch.
40	6122 - Black Spruce	Sapling Well	6.6	40	Immature	Mainly dense sub-merchantable black spruce with few other species, some are dead and most others have been hit with bud worm- they are bushy with multiple leaders.  OPIC - FMD: Due to the extremely high water table, the site index appears to be too low for commercial management. A few trees have reached merchantable size on slightly elevated spots.
41	6122 - Black Spruce	Poletimber Well	28.7	90	51-80	OPIC - FMD: Overall this is a sparse stand of slow-growing timber. Pockets of denser timber occupy the areas with slightly higher ground, but the lower spots are more open. The understory (fully stocked with spruce and tamarack up to 4" DBH on the better sites) indicates variable site productivity. Some partial cutting occurred in the southern portion of the stand around 1960. The site index given represents the areas with denser timber. The ground cover generally consists of lowland shrubs.
42	4112 - Maple, Beech, Cherry Association	Sawtimber Well	13.1	90	81-110	Cut heavily in 1995, fantastic regeneration, includes some cherry and yellow birch.  OPIC - FMD: Upland mixed hardwood stand - select cut in 1995. The understory features a mix of maples, beech, yellow birch, balsam fir and hemlock regen. The poles average about 8-9" DBH, while the logs are generally 12-14". Most of the hemlock is in or near the transition zone to the lowland conifer types. The Old Seney Rd. is part of the snowmobile trail network, and adjacent to this stand.



Stand	Level 4 Cover Type	Size Density	Acres	Stand Age	BA Range	General Comments:
43	6129 - Mixed Coniferous Lowland Forest	Poletimber Well	8.4	90	81-110	<p>Composition changes the length of the stand, more lowland hardwood in north to conifer in south.</p> <p>OPIC - FMD: This stand is a mix of conifers and hardwoods on a transitional site between the upland hardwoods and the cedar. The year of origin is a reasonable estimate of the age of most of the stand's components, but the hemlock and larger yellow birch (13-16" DBH) are almost certainly older. The understory varies from pure balsam fir to a diverse mix of hardwoods and conifers. Harvest now. Do not cut hemlock or cedar. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and birch.</p> <p>The Old Seney Rd. is part of the snowmobile trail network, and adjacent to this stand. Sale sold to zellar ex under contract number 41-023-08-01 osr conifers Unit returned uncut. RH3/22/14</p>
44	6121 - Tamarack	Poletimber Well	2.1	70	111-140	<p>Stand was set up last entry for harvest and returned.</p> <p>OPIC - FMD: Breaking up and blowing down - harvest now. Listed here as a conversion to a lowland conifer mix, but tamarack is likely to become a major component of the next stand. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and birch.</p> <p>The Old Seney Rd. is part of the snowmobile trail network, and adjacent to this stand. Sale sold to zellar ex under contract number 41-023-08-01 osr conifers Unit returned uncut. RH3/22/14</p>
47	6122 - Black Spruce	Poletimber Well	8.3	80	51-80	<p>Size classes to jump around, the aspen and birch are in decline. Portion of stand was set up for harvest.</p> <p>OPIC - FMD: This stand is a mix of conifers and hardwoods on a transitional site between the upland hardwoods and the cedar. The year of origin is a reasonable estimate of the age of most of the stand's components, but the hemlock and larger yellow birch (13-16" DBH) are almost certainly older. The understory varies from pure balsam fir to a diverse mix of hardwoods and conifers. Harvest now. Acceptable regeneration includes all conifers, lowland hardwoods, aspen and birch.</p> <p>The Old Seney Rd. is part of the snowmobile trail network, and adjacent to this stand. Sale sold to zellar ex under contract number 41-023-08-01 osr conifers Unit returned uncut. RH3/22/14</p>
48	4138 - Aspen (OI)	Sapling Well	2.6	21	Immature	OPIC - FMD: Young aspen with some scattered residual hardwood from the previous stand.
49	6112 - Lowland Aspen	Sapling Well	3.6	21	1-50	<p>Southern finger is a drain with ash and elm. Along road some hemlock and fir.</p> <p>OPIC - FMD: Young aspen with some scattered residual hardwood from the previous stand.</p>
50	4110 - Sugar Maple Association	Sawtimber Well	32.0	90	141-170	<p>Hilly terrain, some beech present and appears to be healthy, scattered X-large white pine.</p> <p>OPIC - FMD: Upland mixed hardwood stand - select cut in 1995. The understory features a mix of maples, beech, yellow birch, balsam fir and hemlock regen. The poles average about 8-9" DBH, while the logs are generally 12-14".</p> <p>The Old Seney Rd. is part of the snowmobile trail network, and adjacent to this stand.</p>



Stand	Cover Type	Acres	Managed Site	General Comments:
9	6225 - Bog	17.8	No	OPIC - FMD: Boggy area featuring leatherleaf, wet grass and lowland brush.
51	122 - Road/Parking Lot	4.7	No	OPIC - FMD: County road right-of-way
401	3102 - Grass	5.2	No	OPIC - FMD: Grass with scattered pockets of trees
402	3102 - Grass	3.2	No	OPIC - FMD: Grass with scattered pockets of trees
403	3102 - Grass	1.6	No	OPIC - FMD: Grass with scattered pockets of trees
404	3102 - Grass	1.0	No	OPIC - FMD: Grass with scattered pockets of trees
405	3102 - Grass	2.0	No	OPIC - FMD: Grass with scattered pockets of trees
406	3102 - Grass	4.7	No	OPIC - FMD: Grass with scattered pockets of trees
407	3102 - Grass	3.9	No	OPIC - FMD: Grass with scattered pockets of trees
408	3102 - Grass	2.6	No	OPIC - FMD: Grass with scattered pockets of trees
409	3102 - Grass	5.0	No	OPIC - FMD: Grass with scattered pockets of trees
410	3102 - Grass	0.8	No	OPIC - FMD: Grass with scattered pockets of trees
411	3102 - Grass	0.6	No	OPIC - FMD: Grass with scattered pockets of trees
412	3102 - Grass	0.5	No	OPIC - FMD: Grass with scattered pockets of trees
413	3102 - Grass	0.9	No	OPIC - FMD: Grass with scattered pockets of trees